

THE CLAIMS

1-5. (cancelled)

6. (currently amended) A thumbwheel input device for a handheld electronic device with a housing₁ in an inclined orientation₁ comprising:

- a. a wheel ~~with~~ that has an axle rotating around a first axis of rotation₁ and that partially protrudes through the device housing on an incline;
- b. a rotating encoder switch ~~for receiving~~ that receives a first input when the wheel rotates about its first axis₁ ~~with~~ and that has an aperture ~~and~~ in which the wheel axle sits;
- c. a printed circuit board with a first side and second side₁ ~~wherein~~ with the rotating encoder switch ~~is~~ attached to the first side of the printed circuit board;
- d. a holder₁ having a second axis of rotation₁ that contains the wheel, the printed circuit board, and the rotating encoder switch, and that ~~which~~ is oriented on an incline;
- e. a tactile switch₁ ~~that is~~ attached to the second side of the printed circuit board₁ for receiving a second input; and
- f. a stop that engages the tactile switch for receiving a second input about the second axis of rotation.

7. (original) The thumbwheel input device of claim 6 wherein the stop is an arm attached to the bottom of the holder that extends up toward the tactile switch.

8. (original) The thumbwheel device of claim 6 wherein the stop is a protrusion from the device housing that extends up toward the tactile switch.

9. (new) A thumbwheel input device for a handheld electronic device with a housing, in an inclined orientation, comprising:

- a. a wheel that is rotatable about a first axis of rotation and that partially protrudes through the device housing on an incline;
- b. a printed circuit board;
- c. a rotating encoder switch attached to the printed circuit board and operatively engaged with the wheel to receive an input when the wheel rotates about its first axis; and
- d. a holder, having a second axis of rotation, that holds the wheel, the printed circuit board, and the rotating encoder switch, and that is oriented on an incline.

10. (new) The thumbwheel input device of claim 9 further comprising a tactile switch attached to the printed circuit board for movement about the second axis of rotation with the wheel, the printed circuit board, and the rotating encoder switch.

11. (new) The thumbwheel input device of claim 10 further comprising a stop that engages the tactile switch to actuate the tactile switch and to limit movement of the tactile switch about the second axis of rotation.

12. (new) The thumbwheel input device of claim 11 wherein the stop is an arm that is attached to the bottom of the holder and that extends up toward the tactile switch.

13. (new) The thumbwheel input device of claim 11 wherein the stop is a protrusion from the device housing that extends up toward the tactile switch.

14. (new) A thumbwheel input device for a handheld electronic device with a housing, in an inclined orientation, comprising;

- a. a wheel that is rotatable about a first axis;

- b. a holder supporting the wheel in a rest position in which the wheel protrudes from the device housing in the inclined orientation, and further supporting the wheel for movement pivotally about a second axis from the rest position to an actuated position; and
- c. a switch responsive to pivotal movement of the wheel from the rest position to the actuated position.

15. (new) The thumbwheel input device of claim 14 wherein the holder supports the wheel for movement pivotally about the second axis from a first angle of inclination in the rest position to a second, lesser angle of inclination in the actuated position.

16. (new) The thumbwheel input device of claim 15 wherein the switch is a tactile switch supported on the holder for movement with the wheel pivotally about the second axis.
